Author _____

_____

_____

Title _____

_____

_____

Class LB2371

Book .W4

Imprint _____

_____

(6—2779) GPO

TRUE AND FALSE STANDARDS OF GRADUATE WORK

BY

ANDREW F. WEST

DEAN OF THE GRADUATE SCHOOL

OF PRINCETON UNIVERSITY

Read in Chicago Friday, March 31st, 1905, at the Tenth Annual Meeting of the North Central Association of Colleges and Secondary Schools.

1905?

mercial, technical or other utilitarian influence has swept on unchecked into university life without disaster to university ideals. And no great period of intellectual illumination and advance has come to any university in all the time of recorded history except through the self-sacrificing devotion of men to the cause of knowledge as embodied in, or, at least, as closely related to the distinctively liberal arts and sciences. This has been our guiding light always.

"And when it fails, fight as we will, we die;
And while it lasts, we cannot wholly end."

A university may have, and a complete university must have, more than this central faculty of arts and sciences. The professional and technical schools which properly round out the circle, so far from being despised as parts of a university, are the great appliances which connect the ideal centre of knowledge with the practical needs of the world. A law school, a medical school, an engineering school, all derive immense benefit by being placed in proper relation to the central faculty of arts and sciences, and give back many benefits in turn. But no aggregation of professional and technical schools makes a real university, because such an aggregation lacks its vital centre, its faculty of arts and sciences, which alone can maintain the universal standards of knowledge in all their exactness and rigor, and thus relate and steady the particular standards of the several professional and technical schools.

The liberal arts and sciences fall into two sections. The first or lower section is the undergraduate college course of study, the one thing in our higher education which is best worth preserving, for this alone furnishes the best basis, which is always

GIFT
MRS. WOODROW WILSON
NOV. 25, 1939

desired, though not as yet generally taken, for subsequent university study, whether of liberal or professional character. So I need not argue in this presence that to preserve and develop the undergraduate college education in its purest form is to do an indispensable service to all forms of graduate study.

Let us turn at once to the graduate work and confine our attention to the other section of the field of liberal studies. Professional and technical studies may in a sense be depended on to take care of themselves. They will always flourish so long as men are seeking to be educated in order to make a profitable living. But graduate work in liberal studies cannot be maintained on this basis, because the end aimed at is different. For if the pursuit of wealth or station is the end aimed at by a man who thinks he is giving himself to the life of a scholar, he is not aiming at a scholarly end. Consequently, in order to maintain its own standards, a true graduate school in the liberal arts and sciences must depend on something else to sustain it. The moment it becomes an employment bureau or an agency for finding places, a sordid motive enters, and it is in danger of ceasing to be a school devoted to the cause of truth and knowledge. Unless, therefore, the life of the scholar is to appeal to men not primarily as a means of livelihood, but because they cannot help following the scholar's life, we have no sufficient basis for justifying the maintenance of this all-important school. And if this school perishes or becomes degraded, you may be very sure that sooner or later every valuable function of the university will be injured.

I suppose we can all accept heartily the statement that the chief business of a university is to

maintain standards,—to determine, inspect, and certify the intellectual and moral weights and measures. I do not doubt we can go farther and agree in asserting that this maintenance of intellectual and moral standards is acutely needed in our own nation at this time when its material interests are becoming so vast and complex. And this, more than all else, is the peculiar and pressing duty of every graduate school in liberal studies. Here the higher teachers of the nation are being trained. Here the influences which make for truth and reason are or, at least, ought to be most pure and uncontaminated. The service to be rendered is priceless, the need is urgent, and the fact that our graduate schools in liberal studies, properly planned and guided, are specially fitted to render this service is the fact which justifies their existence.

It therefore becomes a matter of the first moment for us that the standards of graduate work should be maintained in as much purity as our means and intelligence permit. We know they will not be perfect at the best, but we also know that if we maintain them at a lower level than we ought, even according to our own imperfect conceptions of duty, there is nothing to keep even our existing standards from deteriorating. The duty of self-criticism is therefore ever with us, not only if we are to improve, but if we are to keep what we have. I therefore ask you to look for a little while at three aspects of this question of true and false standards in graduate work,—namely, our standards of knowledge, our standards of expression, and our standards of judgment.

1. The standards of knowledge in graduate work are especially threatened just now by the antagonism of an unenlightened specialization. This is not

only the curse of the specialization which does not rest on a sound general education, but in a degree of all specialization which does not limit the subdivision of studies by some consideration of the intrinsic value of the thing studied. What knowledge is of most worth? is the fundamental question which tests every graduate study and every graduate student, as it does everyone who professes to be a thinker in any field of knowledge at any stage of his life. It has now become a very fair question whether the subdivision of topics has not gone so far that not only the perception of relative values is clouded, but even the community of intellectual interests among our higher students is being destroyed. Certainly many of our scholars seem to be subjects of some petty principality rather than freemen in the commonwealth of knowledge.

It is a matter of common remark that many of our rising students in science are only too ignorant of literature, many philosophers ignorant of science, and many literary men ignorant of both. But this is not the full extent of the trouble. Many men, whether in science or philosophy or literature or history, are unacquainted with and utterly uninterested in either science or philosophy or literature or history as a whole. We may subdivide still more and find that one philosopher is a logician only, one scientific man a biologist only, and some other scholar a classical philologist only. Would that we could stop here. But we must go on until we discover that there are many who are familiar only with some subdivision of a division of their logic or biology or philology. They may be known by two characteristics: The first is their intensive knowledge of a small portion of

some subject, which is all very well, and the second is their extensive ignorance of everything outside that small portion of their subject, which is not well at all. How vividly it brings out the point of Montaigne's satirical story. As he rode across the plain one morning, he encountered a company of gentlemen and said to them "Good morning, Messieurs," and the leader of the company sharply replied "We are not Messieurs. My friend here is a grammarian and I am a logician." Were these worthy scholars living today, perhaps they would not be able to profess even so much. The one would likely be a student of some little part of syntax and the other the exploiter of a mechanical device for grinding out some special results of the use of the syllogism. This again may be well enough, provided the specialist is not making it the end of his intellectual life, provided he constantly realizes that the only valuable specialization lies in studying the general in the particular, and that the relating of an accurately determined particular to the general is the only thing which gives the results of specialized study their place and shows their size in the body of valuable knowledge. We are not objecting to specialization—far from it,—but solely to the study of the unimportant. And this may take many forms. It may take the form of investigating something which, when ascertained, is found to be a trifle. Or it may take the form of solemnly proving the obvious by an elaborate array of statistics, as when we are shown conclusively by tables of percentages, which have been tested and re-tested, that a given number of children born and bred in the city, compared with the same number born and bred in the country, show less knowledge of the different kinds

of plants, grains, birds and beasts than do their rural compeers. Of the same nature is the proof I read recently, showing minutely and beyond the shadow of a doubt that in the domain of "child psychology" there was a marked distinction between the preferences of young boys and girls for animal pets, more girls than boys preferring birds, and that unkindness or cruelty to an animal was from thirty to fifty per cent. more shocking to a girl than to a boy. Does one need to pursue higher university studies in order to know this?

A force which is always operating to increase the perplexities of the situation is the mania for publication. It is assumed that production of original results, published so all may have a chance to read and test them, is a necessary mark of the higher scholarship. Pressure is therefore constantly felt by the aspiring young candidate to justify himself in the eyes of other scholars in this way. Our embryo Doctors of Philosophy must write and print a dissertation. This again is very well, if the man who is writing the dissertation has a sensible mind and is writing about something that needs to be made known. But what has come to pass? Another deluge! The number of reviews, scattered articles and contributions of every sort in any one great subject, such as biology, or history, or chemistry, or classics, is so great that it is doubtful whether any human being can read in ten years the output in any one of these subjects for one year. The vast mass of publications is piling up unsifted, unorganized, and therefore unavailable to a large extent for future use. It reminds us a little of what Carlyle said about the voluminous archives of the French Revolution: "The French

Revolution consists of some tons of manuscript slowly rotting in the European libraries."

The menace to our standards of knowledge offered by intemperate specialization is thus increased by a false notion as to what scholarly productivity is. It consists not only in the advancement of knowledge, but in the diffusion of knowledge, and, above all, it consists primarily in the advancement and diffusion of the more valuable knowledge. And, in passing, let us ask how anyone can fail to see that the question whether a certain body of knowledge is new or old has in itself nothing to do with the question of relative values. Furthermore, in the forming of a great scholar by the close personal touch of his master there is a far nobler form of productivity than the writing of even an important dissertation. As a rule, the best "collected works" a scholar can leave is a group of great students. In the light of such considerations, is it not clear that the entirety of our standards of knowledge is being menaced? The pure white light is being broken into the many beams that compose it, and many there are who see not even so much as one whole color, but only some one hue of that color in the great spectrum. The clear organization and evaluation of the knowledge we now have seems at the present time of more importance than all the stray advances hither and thither.

Our standards of knowledge therefore need to be centered in the general body of ascertained truth. We must take our position, in the words of Francis Bacon, that "philosophy and universality are not idle studies," and we must carry this so far as to believe that only in the light of the universal shall we understand the worth and bearing of the particular.

And as the only available practical help towards securing this attitude of mind in our graduate students, we must insist on a clear and pure preliminary training in liberal college studies, followed by such a training in their graduate work as constantly keeps them in touch with the community of intellectual interests outside their special field of study. And to secure this in turn we should aim to secure as graduate students only men of strong, all-round ability, open vision and wide sympathies. In short we must, first of all, secure the right kind of man as a graduate student. Having done this, we may rest assured that all other desirable results may be made to follow.

2. When the harmonious standards of general knowledge are lost sight of, particular standards suited to one or another specialty are apt to take their place. Partly as a result of this, there comes a corresponding change in the standards of expression. When the broad view is lost, simplicity and universality of statement, and a consequent attractiveness and beauty of presentation, are apt to suffer. It is not enough that a book or dissertation in the field of scholarship be accurate and painstaking, if it is to survive in the recollection of men. As we review in thought the books and papers which have made a mark on the intellectual life of any period, it is easy to see that many able contributions to knowledge have passed into oblivion because they were not engaging and readable, whereas one of the distinctive marks of the finest class of such compositions is their convincing charm of style. These are the classics of science and philosophy, as well as of literature. A scientific writer who has the artist's sense has thus an advantage over his equally able rival, and some-

times over his abler rival, who lacks this sense. Now one of the most evident faults of the mass of specialized publications which now occupy the main place in our literature of scholarship is a sort of solemn pedantry. This springs from the entire subordination of the writer to his restricted theme, and to the particular technique of language which belongs to his specialty. He does not dominate his subject, but is mastered by it. He therefore writes too much in a dialect, and not in a literary way. He becomes dry and lifeless. Of course every subject and every subdivision of a subject has its own furniture of ideas and must make use of the technical words which alone set forth these ideas accurately. But this has been fearfully overdone. If it sufficed a Newton to define the elusive atom—whether rightly or wrongly is of no importance here—as "the least part of matter, ought we not to take courage from his example and insist that technical terms, except when necessary, and highly formal language, and in fact all forms of swollen diction, be excluded from the scholar's writing. The difficulty of the ideas is sufficient without enveloping them in a fog of words. Let us somehow manage to keep the common store of pure English as the one treasury to which we resort for everything common English words can express. In this way alone shall we be able to preserve a general reading interest which will steadily connect the publications in one department of knowledge with the publications in another. Descartes has said that clearness is a test of truth. Without going so far as to reverse this and to assert that obscurity of statement is evidence of error, we may at least use the maxim as a warning to all men who are prone to write in a formidable technical dialect.

One other thing may be said in this connection: Pretentiousness of any sort is unscholarly, whether it be in the form of conceit as to the value of one's own thoughts or in the form of grave pedantry in proclaiming them to others. And, lastly, on this point it may be asserted that the man who is a slave to a technical terminology is in constant danger of getting away from the concrete truth of what he is studying into a region of artificial construction, where he is so much occupied with the scaffolding and outer appliances that he mistakes work on these for work on the real building.

3. Back of all standards of knowledge and expression in the scholar's life lie his standards of judgment. On these, more than on anything else, depend the genuineness and permanence of what he does. We may leave geniuses aside in this discussion, because there is no use or need of legislation for them, and after all they are very few in number, supreme as their distinction is. And yet, even in the case of geniuses, we shall find more instances of sound common sense than might be expected. But what of the mass of scholars? What is to be the ultimate guarantee to mankind generally that their work is intrinsically valuable, whether it be brilliant or plain, extensive or limited, commanding or humble? Faraday somewhere writes that the education of the judgment is the chief benefit of a scientific training, and Huxley has told us that scientific ability in its last analysis is nothing less and nothing else than "trained common sense." How this throws us back on the personality of the man whom we are to encourage to be a graduate student! It thus becomes primarily the question not of what he can know, how he can

express it, or how much he can do, but what kind of a man he is. The reasonings and conclusions of a vain man will be tinged with vanity. The judgments of a man "deep versed in books, but shallow in himself," will not permanently appeal to the respect of his fellow men. The capricious or adventurous or self-advertising scholar is, so far forth, not a true scholar. The fate of our higher studies, in their effect on the men we influence, depends first of all on what kind of men we are. The kind of scholar any man is to become, so far as the abiding value of his influence goes, is determined in the last resort not so much by what he knows or says as by what he believes and loves. He must have the lover's instinct, almost the art of divination. Like the miner, he must have the eye that knows the ores of gold from fool's gold. The student who naturally longs to know the things of most worth, and searches for them in all simplicity and sincerity, and purposes to turn all to the best account by making his acquirements accessible and serviceable to his fellowmen, is the only kind of man who ought to be encouraged to enter our graduate schools. And this kind of man is most naturally bred in the comradeship of our college life and in the atmosphere of liberal studies. What a mistake to fail in any way to make our graduate schools supremely attractive to just this sort of man. Given the personal qualities indicated and a suitable college training, and on top of this a life in graduate studies environed by the friendships that arise from the constant interchange of ideas between men studying in different departments of knowledge, how can the young scholar, so circumstanced, fail to develop that "trained common sense," that well-

poised judgment which must enlighten all his thinking and all his doing if he is to be the scholar we are describing.

It has often been debated whether the theoretical or the practical mind is the higher type. If the terms are used in their proper sense, it seems to me there can be only one answer: The practical mind is the better, because sound judgment, which is essential to all sane scholarship, is an eminently practical thing. It is this that transforms knowledge into wisdom. The brilliant theoretical scholar, without this balance, is structurally weak. But let us not misunderstand what this practical mind is. It is not cut off from theory. In fact the highest practical scholars are those most deeply grounded in theoretical knowledge. But they differ from the merely theoretical scholars in being able to use that knowledge steadily in applying it to the best advantage, and consequently the man who is a practical scholar in this sense is the only one who unites the best traits of the theoretical and practical mind. So when we see men of flighty judgment, erratic purposes, and unsteady effort, let us keep them out of our graduate schools as surely as we keep out the drone or ought to keep out the dullard.

At this time, more than ever before, business and professional life, with their attractive careers and dazzling rewards, are taking most of the able men of the conntry. The attractions of the scholar's life are not relatively as great as they were a generation ago, nor is the honor paid to the scholar so great in our land as in the older civilizations of Great Britain, France and Germany, And yet on the little band of scholars in the liberal arts and sciences depends, more

than ever before, the tone of our nation in things intellectual and moral. We have already too many second-rate and third-rate and fourth-rate men among our scholars. We shall never be short of these. But on our graduate schools in the liberal studies rests the supreme privilege and duty of standing more resolutely than ever for the best standards of knowledge, expression and judgment, so that the small company of picked men who are best fitted by reason of their high manhood to become our best scholars will naturally resort to our graduate schools and lift them, and with them the higher American scholarship, to a level never attained before. And may we live to see that day!

LIBRARY OF CONGRESS
0 019 751 271 4